

We claim:

1. A dispersion compensation module for optical communication comprising:  
a take-apart cassette having
  - (i) a first part with a first and a second shaped structure of selected height and thickness therein, said first shaped structure being located within said second shaped structure, and
  - (ii) a second part, said second part being a lid for said first part;
  - (iii) a coil of optical fiber having a first end and a second end, said coil being between said first and second shaped structures; and  
said first and second end of said coil being connected to a first and a second pigtail, respectively; said pigtails being located at the outer perimeter of said cassette for connecting said coil of optical fiber within said cassette to an optical communication system;  
wherein said second shaped structure has at least two openings there through for passage of the first and second ends of said fiber coil to said first and second pigtails, respectively.
2. The dispersion compensation module according to claim 1, wherein said module has a first layer of resilient material of selected thickness located between said shaped structures and said lid, said resilient material being continuous and covering at least the inner diameter of the second shaped structure.
3. The dispersion compensation module according to claim 2, wherein, optionally, said coil of fiber is additionally cushioned by an second layer of resilient material, said second layer being formed to fit between said first and second shaped structures and having a thickness sufficient to fill the volume between the fiber coil and said first resilient layer.
4. The dispersion compensation module according to claim 1, wherein said coil of optical fiber is separately wound on a winding spool and removed from said winding spool prior to being placed between said two shaped structures.
5. The dispersion module according to claim 1, wherein said shaped structures are circular structures.

6. The dispersion module according to claim 1, wherein said shaped structures are elliptical structures.

7. A method of making a dispersion compensation module containing optical fiber, said method comprising the steps of:

winding optical fiber about the hub of a take-apart winding spool;  
removing said fiber from said winding spool, said fiber having two ends;  
placing said fiber between a first and a second shaped structure in the first part of a two part cassette tray;  
connecting the end of said fiber to a connecting element at a perimeter of the cassette tray;  
placing a resilient material over said optical fiber;  
placing a second part lid on said first part tray; and  
fastening said lid to said first part tray.